

WEATHER OF THE MONTH.

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS.

NORTH PACIFIC OCEAN.

By F. G. TINGLEY.

Reports at hand indicate that weather conditions over the North Pacific Ocean during the month of June as a whole closely approximated the normal. However, for the first several days the activity noted in May continued, with pressure generally below normal over the eastern half of the ocean, where the North Pacific anticyclone is usually well established at this season. At this time, also, reports from vessels in Asiatic waters indicated the existence of a typhoon. There was a disturbance with a well-defined center to the east of Manila on the 1st which moved to the northeastward during subsequent days, traversing the island of Nippon during the 4th and 5th.

On June 6, the American S. S. *City of Berkeley*, Capt. Alex. Watson, from Honolulu for Yokohama (in latitude $34^{\circ} 32' N.$, longitude $153^{\circ} 05' E.$, at noon of the 6th), came under the influence of this depression. Capt. Watson reports as follows:

"June 6-7, weather showed every sign of a typhoon having occurred. Barometer fairly low; clouds unusually heavy; W.-NW. swell, changing to W.-SW. No gales or heavy wind at ship."

This depression can be traced as far as the Gulf of Alaska, which it reached about the 15th, but apparently none of the reports that have been received is from a vessel that was near the center.

After the 6th, moderately high pressure covered the central and eastern portions of the ocean, the crest rising above the normal maximum of 30.25 inches on several days during the last decade.

A result of this was to freshen the trades between the mainland and the Hawaiian Islands, affecting a number of ships on the route between San Francisco and Honolulu. One vessel, the Dutch S. S. *Batoe*, reports as follows:

"Gale began on the 18th. Lowest barometer 29.94 inches at 8 a. m. of the 20th, latitude $37^{\circ} 24' N.$, longitude $123^{\circ} 34' W.$ End on the 20th. Highest force of wind, 9; shifts, none."

NORTH ATLANTIC OCEAN.

By F. A. YOUNG.

The average pressure for the month at land stations on the coasts of the Atlantic Ocean, did not as a rule, vary greatly from the normal; except that it was somewhat lower than usual on the east coast of Newfoundland and higher in northern Scotland.

Ordinarily there are fewer days in June in which winds of gale force are encountered over the ocean than in any other month, and the month under discussion was no exception to the general rule over the ocean as a whole, although in three 5-degree squares between the forty-fifth and fiftieth parallels and the twentieth and thirty-fifth meridians, gales were reported on three days, which is slightly above the normal.

According to the reports received, there were about the usual number of days with fog on the Banks of Newfoundland and the American coast, while it was much more frequent off the British coast and in the Azores.

On the 1st there was a LOW with limited storm area central about 300 miles east of St. Johns, Newfoundland, as shown on Chart IX. The storm log from the American S. S. *Hanover* is as follows: "Gale began May 31. Lowest barometric reading 29.59 inches at 2 a. m. on June 1; position $41^{\circ} 10' N.$, $46^{\circ} 30' W.$ End of gale on the 1st. Highest force of wind, 9; shifts of wind near time of lowest barometer, N. to NW." This disturbance had moved slowly eastward by the 2d (see Chart X), and on that date a few reports were received from vessels in the easterly quadrants denoting southerly gales. The observer on the American S. S. *Western Star* reports: "Gale began on the 1st. Lowest barometer 29.60 inches at 9 a. m. on the 1st; position $48^{\circ} 47' N.$, $36^{\circ} 15' W.$ End of gale on the 2d. Highest force of wind 8; shifts SSW. to SSE."

From the 3d to the 5th no gales were reported, and fog occurred on all three days off the European coast, and on the 3d in the vicinity of Halifax, N. S. On the 6th, two vessels about 200 miles east of the Virginia Capes reported southerly gales of about 50 miles an hour, with moderate weather over the rest of the ocean, and fog off the Nantucket shoals and over the southern steamer routes, near the fiftieth meridian. From the 7th to the 10th there was another period of nearly normal conditions, with fog over the Banks of Newfoundland on all four days, and off the coast of France on the 7th.

On the 11th there was a well-developed LOW central near latitude $48^{\circ} N.$, longitude, $15^{\circ} W.$, with gales between the center and the 23d meridian, as shown on Chart XI. The storm log from the American S. S. *Saguache* is as follows: "Gale began on the 10th. Lowest barometer 29.17 inches on the 11th; position $49^{\circ} 54' N.$, $14^{\circ} 42' W.$ End of gale on the 12th. Highest force of wind 9; shifts of wind SE-N-NW." On the 12th the Belgian S. S. *Sierra Madre* encountered a moderate westerly gale while about 500 miles east of Bermuda. The storm log states: "Gale began on the 12th. Lowest barometer 29.80 inches at 5 a. m. on the 12th; position $33^{\circ} 35' N.$, $53^{\circ} 40' W.$ End of gale on the 13th. Highest force 8; shifts of wind SW-W." On the 12th and 13th fog was reported over the steamer lanes between the fortieth and fiftieth meridians. From the 14th to the 16th moderate winds were the rule, with fog at the Azores and over the western part of the steamer lanes on the 14th and 15th, and in the vicinity of the British Isles on the 16th.

The American S. S. *Abbeville* ran into a southwesterly gale on the 17th while a short distance north of Bermuda, as shown by the storm log. Gale began on the 16th. Lowest barometer 29.70 inches, at midnight of the 16th; position $36^{\circ} 07' N.$, $64^{\circ} 30' W.$ End of gale on the 18th. Highest force of wind 8; shifts of wind, steady. On the 19th there was a disturbance of some force and limited area over the eastern part of the steamer lanes; the storm log of the British S. S. *Stanmore* is as follows: "Gale began on the 19th. Lowest barometer 29.20 inches at 10 a. m. on the 19th; position $49^{\circ} 39' N.$, $26^{\circ} 00' W.$ End of gale on the 20th. Highest force of wind 10; shifts of winds SSW.-NW. by W." This LOW drifted slowly eastward, and on the 20th the center was near latitude $51^{\circ} N.$, longitude $20^{\circ} W.$ The observer on the British S. S. *Penmorvah* states in the storm log: "Gale